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September 10, 2004

Mr. Nabil S. Fayoumi
U. S. EPA - Region 5
77 West Jackson Boulevard (SR-6J)
Chicago, Illinois 60604-3590

Re: Sauget Area 2 Site – October 3, 2002 Unilateral Administrative Order (UAO) Groundwater Operable Unit
Monthly Report; August 1 - August 31, 2004 Reporting Period

Dear Nabil:

Attached is the Monthly Report for the Sauget Area 2 Site October 3, 2002 Unilateral Administrative Order (UAO) - Groundwater Operable Unit. This submittal is in fulfillment of the monthly reporting requirements of the UAO, Section XII, paragraph 62, Progress Reports. This report is for the period August 1 – August 31, 2004.

Sincerely,

Steven D. Smith
Project Coordinator

cc: Ken Bardo, - U. S. EPA
Mayor Sauget - Sauget, IL
Sandra Bron – IEPA
Mike Coffey - USFWS
Village of Sauget – c/o P. H. Weis & Associates (Attn: Brian Nelson)
Mayor Frank Bergman – Cahokia
L. Glen Kurowski - Monsanto
Cathleen Bumb – Solutia
Richard Williams – Solutia

Sauget Area 2 Site - Sauget, Illinois

October 3, 2002 UAO – Groundwater Operable Unit

Status Report

Date of Report: September 10, 2004
Period Covered: August 1 - August 31, 2004

Agency Actions / Communications

In an e-mail message dated June 19, 2003, U. S. EPA requested the submission of revised versions of the Focused Feasibility Study, the Remedial Design Work Plan, and the Pre-Final (95%) Remedial Design. The revisions were required to allow the use of a slurry wall rather than jet grouting for construction of the barrier wall. The revised documents were submitted on July 3, 2003. The ESD was issued by US EPA on July 30, 2003. The Final Design Submittals were approved by EPA on October 16, 2003.

Work Performed During the Reporting Period

Slurry Wall

- Total excavation through August 31, 2004 = 414,623 sq ft. This represents approximately 93 percent of the total excavation required to complete the wall, an increase of 18 percent over the completion level at the end of July.
- Total backfill placed through August 31, 2004 = 297,072 sq ft. This represents 67 percent of the total backfill required to complete the wall, an increase of 8 percent over the previous month.
- Cleaning and backfilling of the trench continued through the month of August, with approximately 4,300 cubic yards of new backfill being placed during the month. The majority of this was placed in the northwestern corner of the site, in the northern portion of the north-south leg of the trench. However, approximately 700 cubic yards were placed in the south leg, completing the backfill in that leg in the early part of August.
- By the end of the month, all of the excavation equipment was working on the north leg of the wall alignment and the toe of the backfill was approximately 150 feet past the northwestern corner of the wall. The backhoe had excavated to an average depth of approximately 80 feet to within 150 feet of the end of the north

leg, while the hydraulic clamshells had excavated the trench down to bedrock to within approximately 550 feet of the end, or approximately 240 feet past the northwestern corner.

- The stormwater culvert at the extreme eastern end of the north leg of the wall was relocated to the east, beyond the end of the wall. The old culvert section was removed and the excavation was backfilled to ensure no slurry leakage along the old culvert alignment.
- Slurry de-sanding continued during the month, with the result that the sand content of the deep slurry in the trench averaged approximately 15 percent.
- A new access road was constructed on the northern side of the site and Riverview Avenue was closed at a point 150 feet east of the eastern edge of Site R.
- A worker pierced a gloved finger with a wire rope cable strand on August 16th. The incident occurred on the night shift, but it was not reported immediately. The following night, the worker complained of soreness and he was taken to the emergency room for treatment. There was no lost time. Daily safety meetings continue on both the day and night shifts and the need to promptly report any injury, no matter how minor, was emphasized at these meetings.
- One of the hydraulic clamshells was damaged on August 19th when a dump truck backed into the cab of the crane. An evaluation of the serviceability of the crane was conducted and the crane was approved for work within one week. There were no injuries associated with this incident.
- A small amount of slurry (20 to 30 gallons) escaped from the exclusion zone during the night shift on August 19th. The excursion appears to have been caused by an unusually intense rainstorm (over one inch of rain). The runoff from the storm collected on top of the slurry and some of the collected water overflowed the containment berm. The material did not flow very far and was never in danger of flowing down the river bank. The release was identified very early the following morning and was cleaned up by that same afternoon. Corrective measures were implemented and the berm in the area of the release has been raised and reinforced.
- A second hydraulic clamshell was put into service early in August. Initially, it only worked during the day shift. However, in the last week of August, it was also placed on the nightshift. Thus, two hydraulic clamshells are now working two shifts, five days per week.
- All QA/QC tests satisfied the project specifications during the reporting period.

Groundwater Treatment

- Pumping rates for the groundwater extraction system were set in accordance with the lookup tables provided in the ROD and the final design for the "no-wall" condition. This resulted in the groundwater discharge to the river being controlled by the system during the entire month.

- Effluent pumping data for each well are attached.
- Piezometer and pumping data are being forwarded to the Agencies weekly.
- The water level readings from piezometers 2-E and 3-W were unstable for several days in the last week of August. One piezometer (3-W) had been affected by a lightning strike and the surge suppressor had to be replaced. The other piezometer was affected by the presence of water in an electrical connection box. Both piezometers were back on line by the end of the month.

Schedule

A new construction schedule was submitted in April showing backfill completion by the middle of November. Since that time, working hours at the site have increased to two 11 hour shifts and a second hydraulic clamshell has been put into service. Because of these changes, it is estimated that the trench backfill will be completed two to three weeks ahead of schedule.

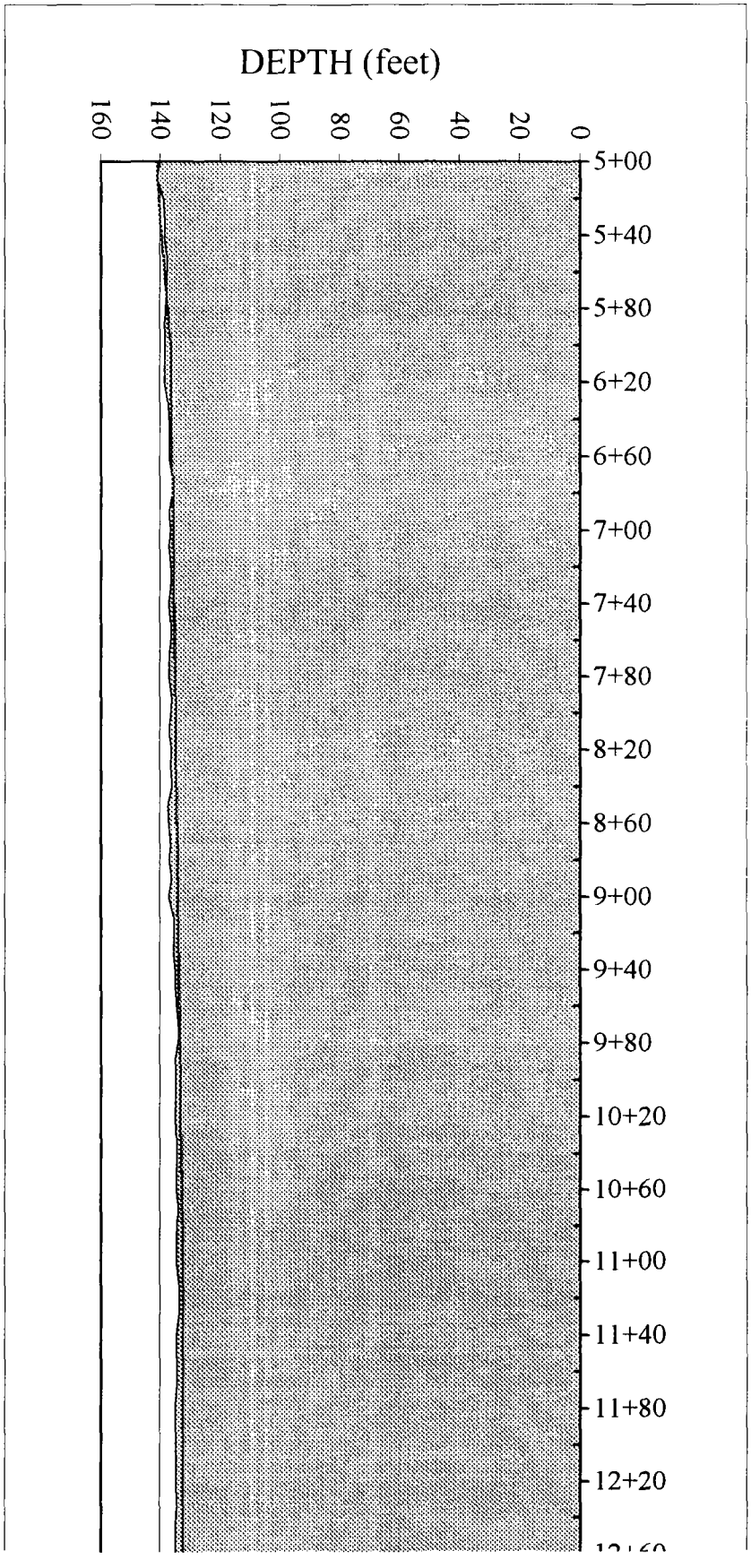
Submittals in June

There were no submittals in August.

Work Scheduled for Next Reporting Period

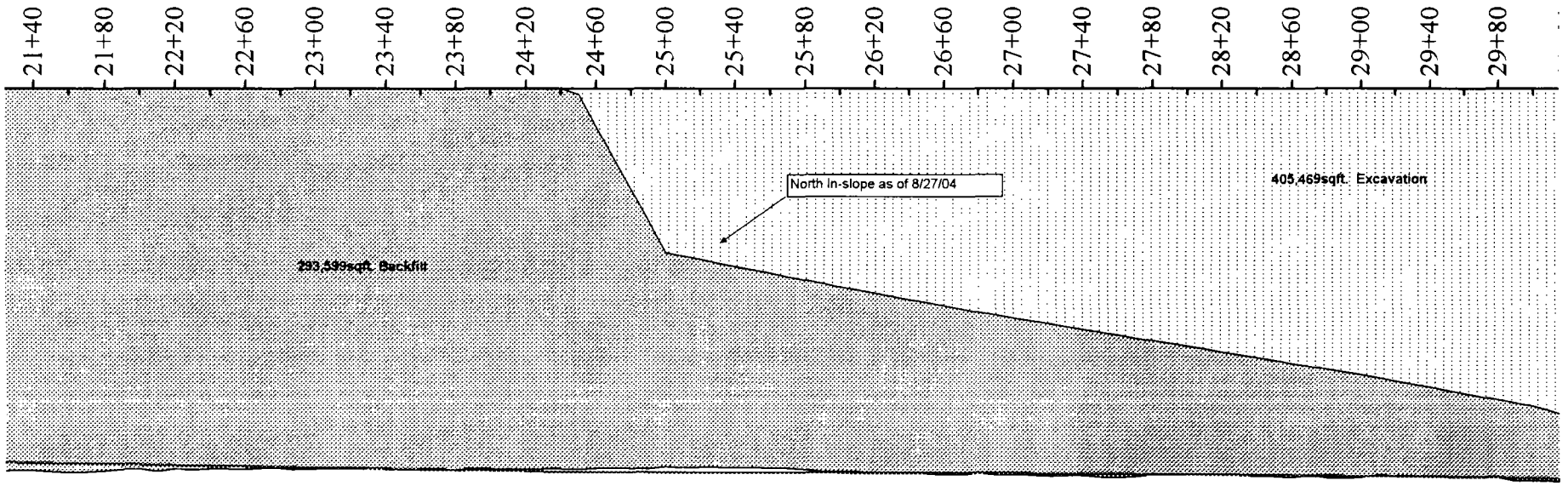
- Continue pumping and treating groundwater based on river levels. System control will be based on river levels, as specified in the ROD and the ESD. Flow rates computed for the "no-wall" condition will be used.
- Continue excavating the remaining section of the north leg.
- Continue cleaning and backfilling the trench.
- Begin final site cleanup in the southern part of the site.
- Begin pumping excess slurry to the containment cell on top of Site R in preparation for solidification.

SLURRY WALL PROFILE

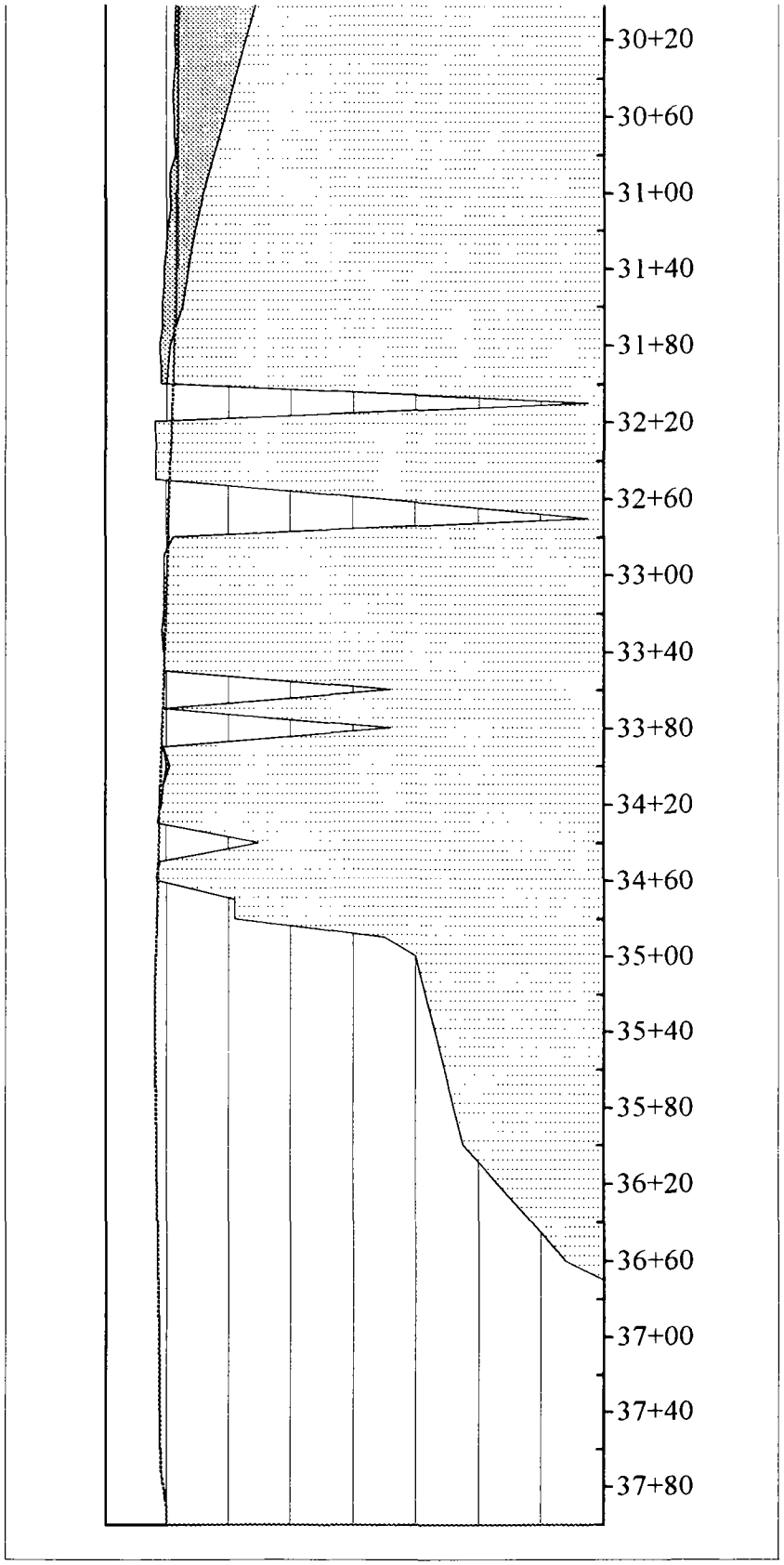

DEPTH (feet)
160
140
120
100
80
60
40
20
0
5+00
5+40
5+80
6+20
6+60
7+00
7+40
7+80
8+20
8+60
9+00
9+40
9+80
10+20
10+60
11+00
11+40
11+80
12+20

SURVEY
12+60
13+00
13+40
13+80
14+20
14+60
15+00
15+40
15+80
16+20
16+60
17+00
17+40
17+80
18+20
18+60
19+00
19+40
19+80
20+20
20+60
21+00
Backfill Area as of 8/27/04
Excavat

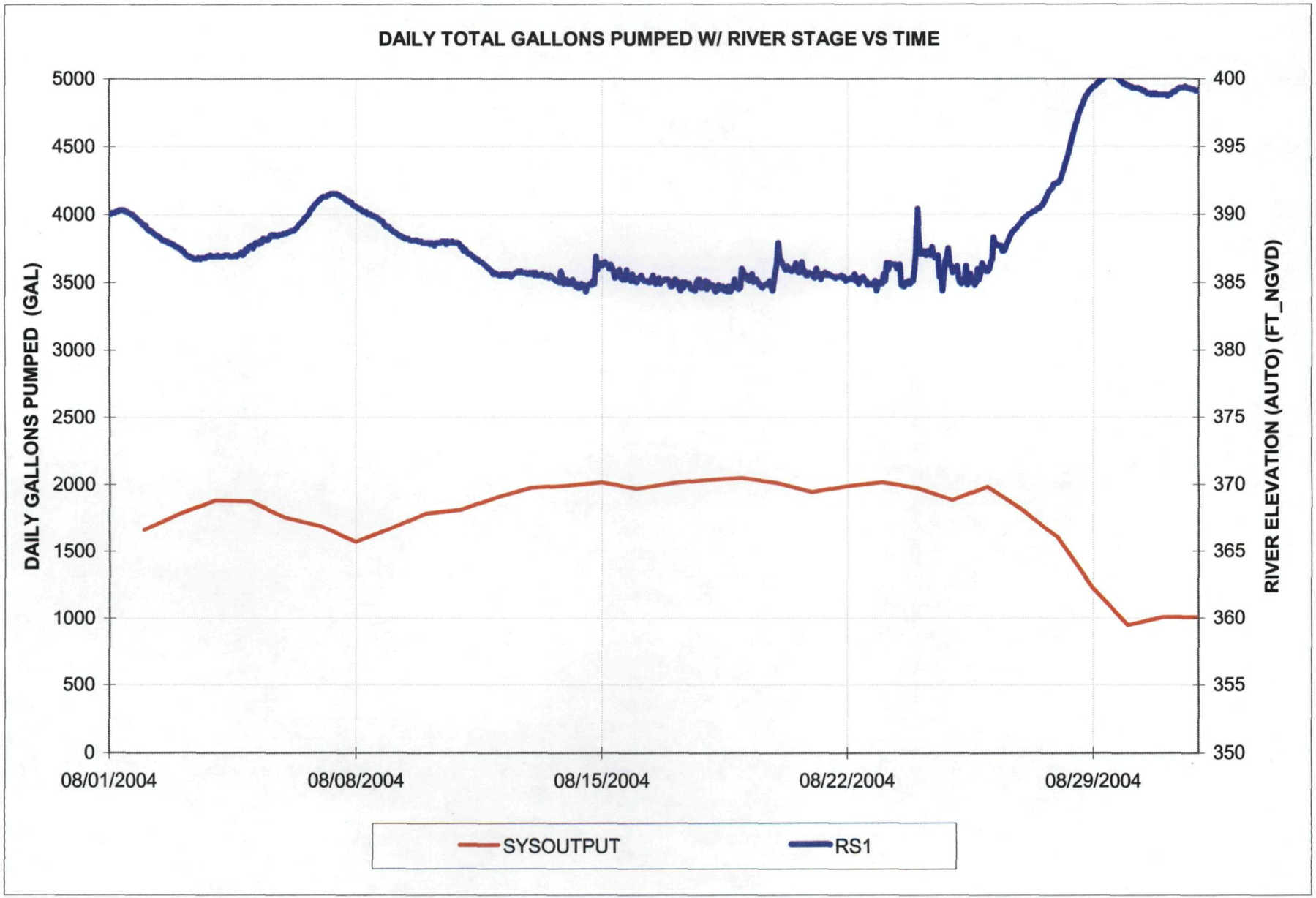
Y STATIONS

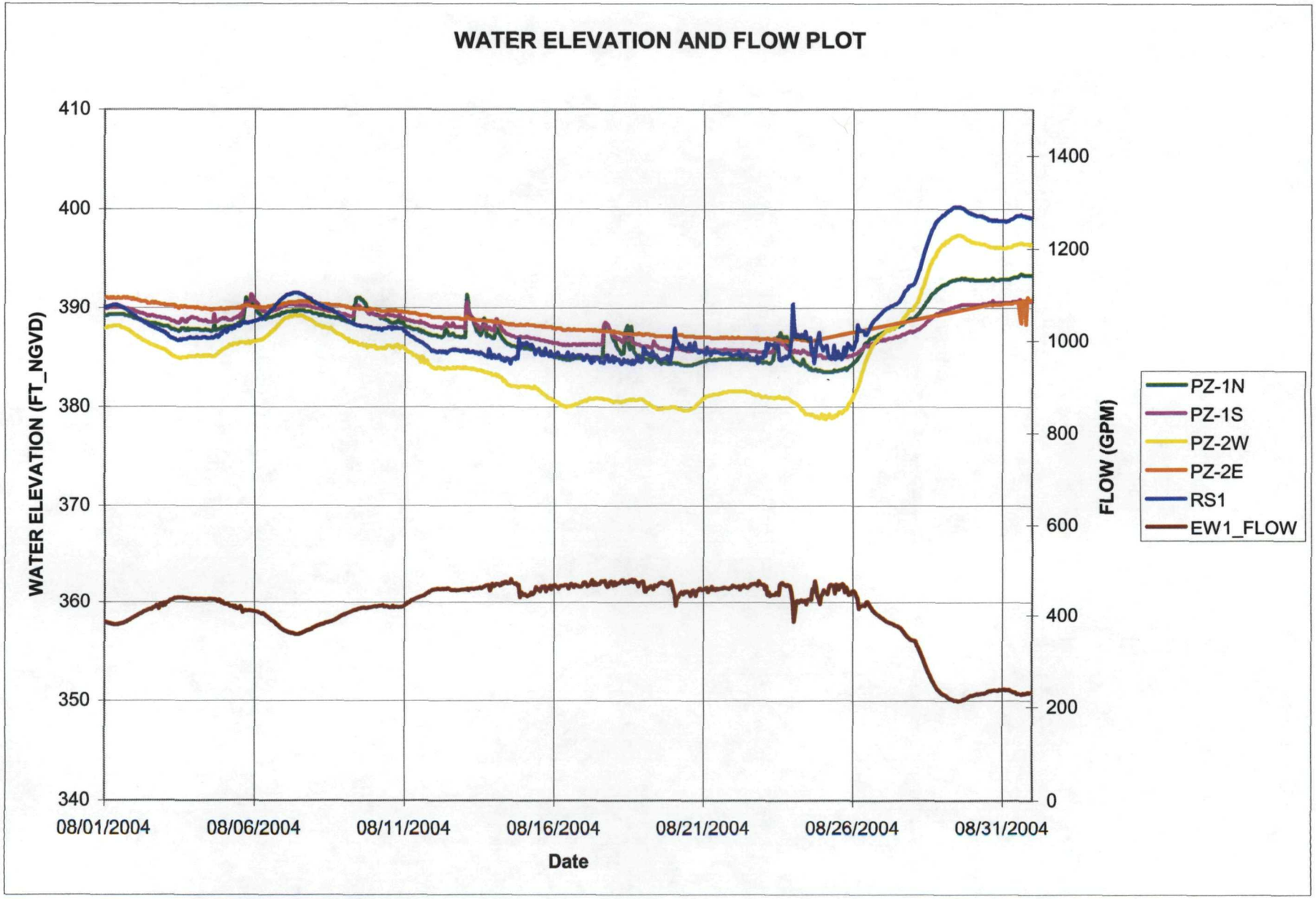


ation Area ☐ Est. Bedrock Elevation


30+20
30+60
31+00
31+40
31+80
32+20
32+60
33+00
33+40
33+80
34+20
34+60
35+00
35+40
35+80
36+20
36+60
37+00
37+40
37+80

PUMPING


DAILY TOTAL GALLONS PUMPED W/ RIVER STAGE VS TIME
DAILY GALLONS PUMPED (GAL)
RIVER ELEVATION (AUTO) (FT_NGVD)
5000
4500
4000
3500
3000
2500
2000
1500
1000
500
0
400
395
390
385
380
375
370
365
360
355
350
08/01/2004
08/08/2004
08/15/2004
08/22/2004
08/29/2004
SYSOUTPUT
RS1


WATER ELEVATION AND FLOW PLOT
WATER ELEVATION (FT_NGVD)
410
400
390
380
370
360
350
340
FLOW (GPM)
1400
1200
1000
800
600
400
200
0
08/01/2004
08/06/2004
08/11/2004
08/16/2004
08/21/2004
08/26/2004
08/31/2004
Date
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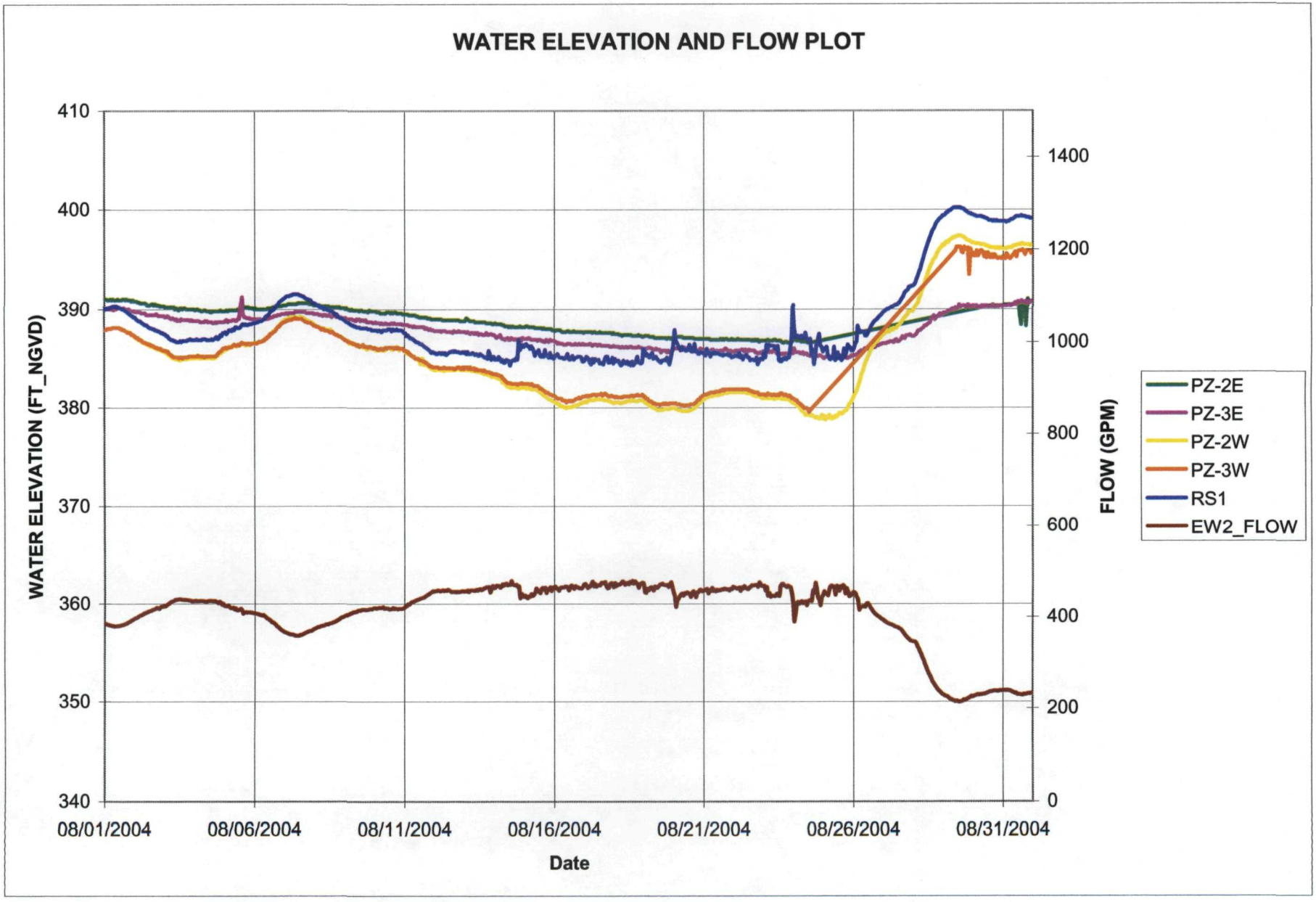
PZ-1S
PZ-2W
PZ-2E
RS1
EW1_FLOW


WATER ELEVATION AND FLOW PLOT
WATER ELEVATION (FT_NGVD)
410
400
390
380
370
360
350
340
FLOW (GPM)
1400
1200
1000
800
600
400
200
0
08/01/2004
08/06/2004
08/11/2004
08/16/2004
08/21/2004
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08/31/2004
Date
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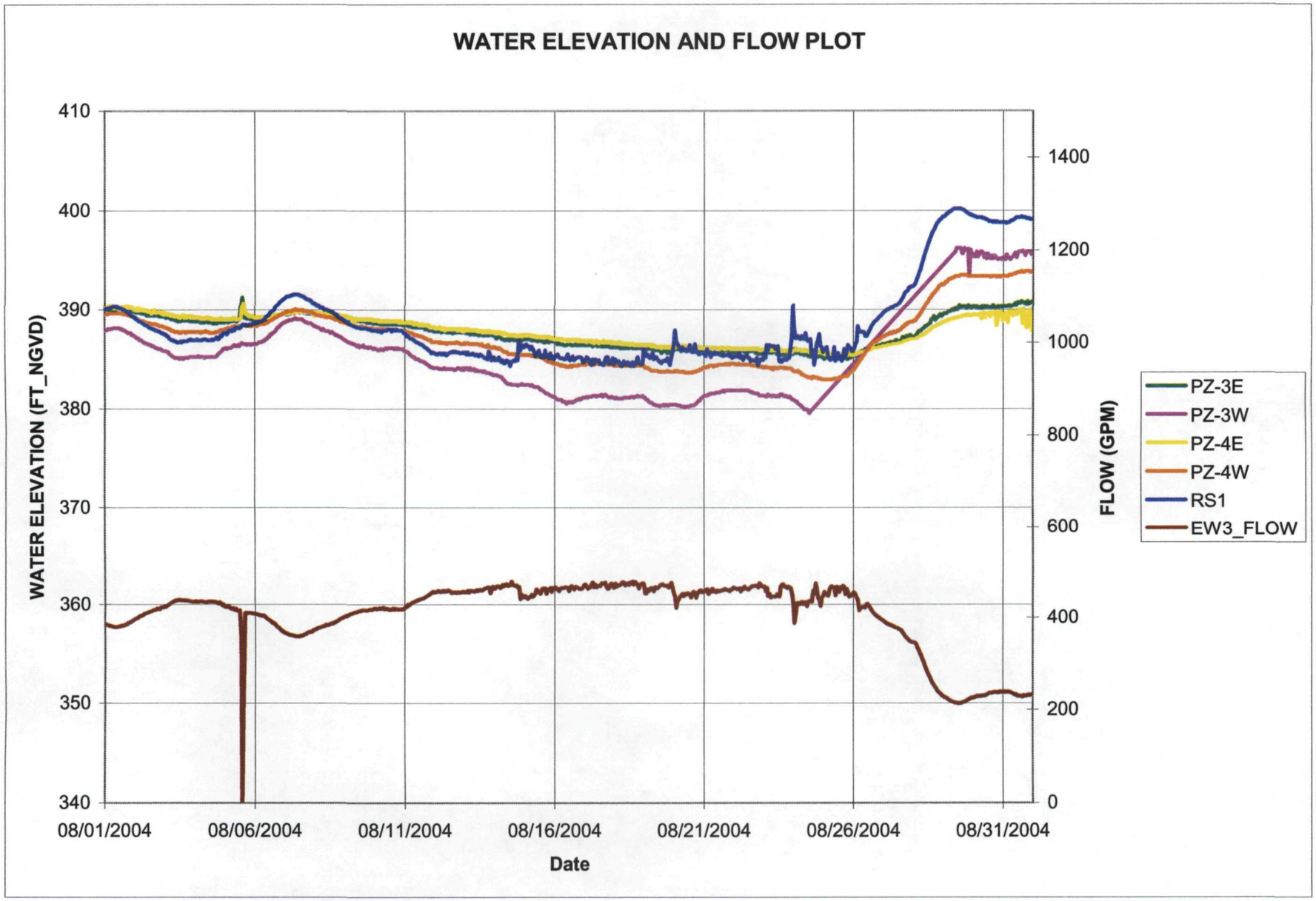
PZ-2W
PZ-3W
RS1
EW2_FLOW


WATER ELEVATION AND FLOW PLOT
WATER ELEVATION (FT_NGVD)
410
400
390
380
370
360
350
340
FLOW (GPM)
1400
1200
1000
800
600
400
200
0
08/01/2004
08/06/2004
08/11/2004
08/16/2004
08/21/2004
08/26/2004
08/31/2004
Date
PZ-3E
PZ-3W
PZ-4E
PZ-4W
RS1
EW3_FLOW